

AMENDED IN SENATE APRIL 27, 2005

AMENDED IN SENATE MARCH 29, 2005

**SENATE BILL**

**No. 600**

**Introduced by Senators Ortiz and Perata**

**(Coauthors: *Senators Alquist, Kuehl, and Romero*)**

~~(Coauthor: Assembly Member Chan)~~ *Coauthors: Assembly Members  
Chan, Koretz, and Pavley)*

February 18, 2005

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An act to add Chapter 8 (commencing with Section 105440) to Part 5 of Division 103 of the Health and Safety Code, relating to public health, and making an appropriation therefor.

LEGISLATIVE COUNSEL'S DIGEST

SB 600, as amended, Ortiz. Biomonitoring.

Existing law establishes various programs for the protection of the public from exposure to toxins, including, but not limited to, the Childhood Lead Poisoning Prevention Act, administered by the State Department of Health Services, which imposes a fee upon manufacturers or persons who are responsible for lead contamination and applies the proceeds of the fee to reduction or elimination of the harm caused by the lead contamination.

This bill would require the Division of Environmental and Occupational Disease Control within the department to establish the Healthy Californians Biomonitoring Program to monitor the presence and concentration of designated chemicals, as defined, in Californians.

This bill would require the department and the agency to establish an advisory panel to assist the department and the agency. The bill would establish the Healthy Californians Biomonitoring Fund for deposit of funds, upon appropriation by the Legislature, and would continuously appropriate the fund for the biomonitoring program. The

bill would require the department to provide public access to information, and to report to the Legislature and the public.

Vote: majority. Appropriation: yes. Fiscal committee: yes.  
State-mandated local program: no.

*The people of the State of California do enact as follows:*

1 SECTION 1. The Legislature finds and declares all of the  
2 following:

3 (a) Chronic disease has reached epidemic proportions in the  
4 United States. An estimated 125 million Americans, or 43  
5 percent of the population, have at least one chronic illness, while  
6 60 million people, or 21 percent of the population, suffer from  
7 multiple chronic conditions. Roughly 20 million American  
8 children suffer from at least one chronic health problem. Cancer,  
9 asthma, birth defects, developmental disabilities, endometriosis,  
10 and infertility, are becoming increasingly common, and mounting  
11 evidence links incidence and severity of these diseases to  
12 exposure to environmental toxicants.

13 (b) Chronic diseases carry enormous costs to California. For  
14 example, the estimated total cost of asthma in California is  
15 approximately \$1.27 billion annually. For individuals born in  
16 1988 with one or more of the 18 most common birth defects,  
17 estimated lifetime costs for medical treatment and lost  
18 productivity exceed \$1 trillion. Special education for the  
19 estimated 1 million California children with learning disabilities,  
20 carries an annual price tag of \$12 billion.

21 (c) An estimated 85,000 chemicals are registered for use today  
22 in the United States. Another 2,000 chemicals are added each  
23 year. Some toxicological screening data exists for only 7 percent  
24 of these chemicals. More than 90 percent of these chemicals have  
25 never been tested for their effects on human health. Large  
26 numbers of these chemicals are found in cosmetics, personal care  
27 products, pesticides, food dyes, cleaning products, fuels, and  
28 plastics. Because of their ubiquity in modern life, Californians  
29 are commonly exposed to multiple chemicals every day. Many of  
30 these chemicals persist in the environment, and accumulate and  
31 remain in body fat, and have been shown to be toxic.

32 (d) Biomonitoring studies have scientifically demonstrated  
33 that human exposure to a multitude of persistent chemicals is

1 both chronic and widespread. The Centers for Disease Control  
2 and Prevention has documented the presence of 116  
3 environmental chemicals in the blood and urine of Americans of  
4 all ages and races. More than 200 synthetic chemicals have been  
5 detected in breast milk, many of which are known to cause  
6 mammary tumors in animals. Unlike the United States, Germany  
7 and Sweden have national breast milk monitoring programs,  
8 which have led to policies that have dramatically reduced  
9 exposure to environmental toxicants.

10 (e) The presence of toxins in the environment raises special  
11 health concerns for California families. The developing fetus is at  
12 heightened risk from in utero exposure to harmful chemicals  
13 because the neurological, reproductive, and immunological  
14 systems of a fetus are still in development. For the same reason,  
15 nursing infants are vulnerable because certain persistent toxic  
16 chemicals concentrate in breast milk. It is important to always  
17 emphasize that studies conducted on breastfeeding consistently  
18 find that breast milk is the best choice for maximizing a healthy  
19 start in life for infants. There is broad consensus among  
20 Medi-Cal providers and maternal and child health advocates that  
21 mother's milk provides a nursing infant with a stronger immune  
22 system, protects the child from illnesses and allergies, provides  
23 vital nutrients during critical periods of growth and development,  
24 and offers other potential protections against environmental  
25 pollutants and pathogens.

26 (f) Biomonitoring data supports public health by establishing  
27 trends in chemical exposures, validating modeling and survey  
28 methods, supporting epidemiological studies, identifying  
29 impacted communities or particularly vulnerable communities,  
30 assisting in health responses to unanticipated emergency  
31 exposures, assessing the effectiveness of current regulations, and  
32 helping to set priorities for reform.

33 (g) The priority public policy recommendation from the 2002  
34 International Summit on Breast Cancer and the Environment was  
35 to establish a national biomonitoring program in the United  
36 States using breast milk and other biospecimens to assess  
37 community health.

38 (h) In September 2001, the Legislature passed Senate Bill 702  
39 (Chapter 538, Statutes of 2001), making California the first state  
40 in the nation to begin planning a statewide environmental health

1 tracking network for chronic diseases and environmental hazards  
2 and exposures. In followup, the Senate Bill 702 Expert Working  
3 Group has recommended the establishment of a statewide  
4 biomonitoring program.

5 (i) The Legislature, therefore, finds and declares that the  
6 establishment of a statewide biomonitoring program is necessary  
7 to identify the presence of toxic chemicals in individuals and  
8 communities, to educate and counsel affected individuals and  
9 communities, and to develop strategies to prevent exposures to  
10 potentially harmful chemicals. A biomonitoring program will  
11 expand biomedical, epidemiological, and behavioral public  
12 health research. California, an established leader in health  
13 promotion, health policy, and health care delivery and response,  
14 should encourage and fund this research, which will contribute to  
15 the health and well-being of millions of people.

16 SEC. 2. Chapter 8 (commencing with Section 105440) is  
17 added to Part 5 of Division 103 of the Health and Safety Code, to  
18 read:

19  
20 CHAPTER 8. HEALTHY CALIFORNIANS  
21 BIOMONITORING PROGRAM  
22

23 Article 1. General  
24

25 105440. (a) This chapter shall be known, and may be cited,  
26 as the Healthy Californians Biomonitoring Program.

27 (b) For the purposes of this chapter, the following terms have  
28 the following meanings:

29 (1) "Department" means the State Department of Health  
30 Services.

31 (2) "Agency" means the California Environmental Protection  
32 Agency.

33 (3) "Director" means the Director of Health Services.

34 (4) "Secretary" means the Secretary for Environmental  
35 Protection.

36 (5) "Division" means the Division of Environmental and  
37 Occupational Disease Control within the department.

38 (6) "Office" means the Office of Environmental Health  
39 Hazard Assessment within the agency.

(7) “Biomonitoring” means the process by which the presence and concentration of toxic chemicals and their metabolites are identified within a biospecimen as a means to assess the chemical body burden.

(8) “Biospecimen” means a sample of human blood, hair, urine, breast milk, *cord blood*, body fat and other body tissue, or any other biophysical substance that is reasonably available as a medium to measure the presence and concentration of toxic chemicals.

(9) “Panel” means the Healthy Californians Biomonitoring Program Advisory Panel established pursuant to Article 2 (commencing with Section 105448).

(10) “Community” means geographically or nongeographically based populations that may participate in the biomonitoring program. A “nongeographical community” includes, but is not limited to, populations that may share a common chemical exposure through similar occupations, populations experiencing a common health outcome that may be linked to chemical exposures, or populations that may experience similar chemical exposures because of comparable consumption, lifestyle, or product preferences.

(11) “Designated chemicals” means those chemicals that are known to, or strongly suspected of, adversely impacting human health or development, based upon scientific, peer-reviewed animal, human, or in vitro studies.

105441. The division in collaboration with the agency shall establish the Healthy Californians Biomonitoring Program. The division is the lead agency for the program unless otherwise specified in this chapter. The program shall utilize biospecimens, as appropriate, to identify toxic chemicals that are present in the bodies of Californians. Biomonitoring shall take place on a strictly voluntary and confidential basis. Results reported pursuant to this chapter shall not disclose individual confidential information of participants. Appropriate biospecimens shall be used to monitor and assess the presence and concentration of designated chemicals.

105443. (a) All participants shall be evaluated for the presence of designated chemicals as a component of the biomonitoring process. Participants shall receive consultation, health care referrals, and followup counseling, and shall be

1 offered educational activities and materials addressing possible  
2 routes of exposure and ways to reduce exposure. Providers shall  
3 receive training in administering the program in an ethical,  
4 participatory, and community-based manner. Any public or  
5 private entity, including local agencies, may provide these  
6 activities by contract.

7 *(b) Communities selected for biomonitoring shall be reflective*  
8 *of the economic, racial, and ethnic composition of the state.*  
9 *Educational and outreach activities and materials used for*  
10 *program participants and communities shall, to the extent*  
11 *possible, be culturally appropriate and translated as needed.*

12 ~~(b)~~

13 (c) After review and analysis of the data, to the extent that  
14 program resources permit, any office or department may  
15 collaborate to determine the presence of a designated chemical in  
16 the environment, and possible routes of exposure. Activities may  
17 include, but shall not be limited to, all of the following:

18 (1) The sharing of existing data and studies, including, but not  
19 limited to, archived biospecimens.

20 (2) Assessments of soil, water, air, food, homes, consumer  
21 products, or other aspects of a particular community.

22 (3) Community education programs to help avoid exposure or  
23 reduce harmful exposures.

24 105444. (a) The department shall adopt guidelines and model  
25 protocols that address the science and practice of biomonitoring  
26 to implement this chapter that accomplish all of the following:

27 (1) Ensure confidentiality and informed consent, and  
28 communicate findings to participants, communities, and the  
29 general public.

30 (2) Emphasize that all aspects of the program are culturally  
31 sensitive.

32 (3) Serve as a guide for other biomonitoring programs  
33 supported by state funds.

34 (4) For biomonitoring using breast milk as a biospecimen,  
35 provide guidelines for individual consultation and community  
36 education regarding the importance of breastfeeding so that the  
37 program does not have any unintended and unwarranted negative  
38 effects upon a parent's decision whether to breastfeed.

39 ~~(c) The department may~~

1 (b) The department shall consider, and adapt as appropriate,  
2 the analytical methods utilized by the federal Centers for Disease  
3 Control and Prevention for the studies known collectively as the  
4 National Report on Human Exposure to Environmental  
5 Chemicals.

6 ~~(d)~~

7 (c) The department shall work in collaboration with the  
8 California Health Tracking Program.

9 ~~(e)~~

10 (d) The division, office, and panel shall work and  
11 communicate with the Primary Care and Family Health Division  
12 of the department, and with other offices concerning interagency  
13 information sharing and synchronization of environmental  
14 tracking and policy information. However, personal information,  
15 as defined in Section 1798.3 of the Civil Code, shall not be  
16 shared without the written and informed consent of the individual  
17 to whom it pertains.

18 105445. The department, to the extent that funds are  
19 available, may enter into contractual agreements with health  
20 clinics, health facilities, community-based organizations, or  
21 experts in a particular field, to perform any of the activities  
22 enumerated in the guidelines adopted pursuant to Section  
23 105444.

24 105446. To the extent that funds are available pursuant to this  
25 chapter, moneys may be allocated from the fund for the purpose  
26 of strengthening the state's laboratory capacity in order to meet  
27 the responsibilities enumerated in this chapter.

28  
29 Article 2. The Advisory Panel  
30

31 105448. (a) The department and agency shall establish the  
32 Healthy Californians Biomonitoring Program Advisory Panel.  
33 The panel shall be composed of 16 members. ~~Two of the~~  
34 ~~members appointed by each of the officers set forth in~~  
35 ~~subdivision (b), eight members as follows:~~

36 (1) Eight members in total, shall have expertise in public  
37 health, environment, epidemiology, and ~~biology, and the biology.~~

38 (2) The other eight members shall include those who have  
39 expertise on the special vulnerability of children, women of  
40 childbearing age, seniors, health affected groups, breastfeeding

1 promotion, and other communities of concern *and one of these*  
2 *members shall be a representative from industry.*

3 (b) The director, the secretary, the President pro Tempore of  
4 the Senate, and the Speaker of the Assembly shall each appoint  
5 four members of the panel. *Each appointing officer shall appoint*  
6 *two members fulfilling the qualifications of paragraph (1) of*  
7 *subdivision (a) and two members fulfilling the qualifications of*  
8 *paragraph (2) of subdivision (a), except that one of the*  
9 *appointments of the secretary shall be the industry representative*  
10 *set forth in paragraph (2) of subdivision (a).*

11 (c) All members shall be appointed to the panel by July 1,  
12 2007. Each member shall be appointed for a three-year term.  
13 Members may be reappointed for additional terms without  
14 limitation.

15 ~~(d) The secretary shall appoint the Chair of the Scientific~~  
16 ~~Committee, and the director shall appoint the Chair of the~~  
17 ~~Community Representative Committee from the panel's~~  
18 ~~membership, who shall also serve as cochairs of the panel.~~

19 ~~(e)~~

20 (d) The panel shall meet as often as it deems necessary, with  
21 consideration of available resources, but at a minimum, twice a  
22 year.

23 ~~(f)~~

24 (e) Subcommittees of the panel reflecting the composition of  
25 the community shall be formed to advise the panel regarding  
26 community-based biomonitoring activities.

27 ~~(g)~~

28 (f) Members of the panel and any subcommittees shall serve  
29 without compensation, unless program funding is made available  
30 for this purpose, but shall be reimbursed for travel and other  
31 necessary expenses incurred in the performance of their duties  
32 under this chapter.

33 ~~(h)~~

34 (g) The panel shall make recommendations to the division and  
35 office regarding the design and implementation of the program,  
36 *with the division and office retaining final decisionmaking*  
37 *authority.* The panel shall review program priorities, draft  
38 protocols, study reports, outreach materials, and shall make  
39 recommendations to the secretary and the director regarding all  
40 of the following:

1 (1) Chemicals that are priorities for biomonitoring in  
2 California and communities where biomonitoring will take place.

3 (2) A review of how findings and reports are communicated  
4 prior to their release to participants, legislators, and the public.

5 (i)

6 (h) The panel shall consider the criteria and recommendations  
7 generated by the department's Biomonitoring Planning Project,  
8 the California Environmental Health Tracking Network, the  
9 California Environmental Health Tracking Program, *the*  
10 *Environmental Health Tracking Planning Consortium*, and  
11 relevant peer-reviewed studies, when making recommendations.  
12

#### 13 Article 4. Fiscal Provisions 14

15 105453. Any funds provided, upon appropriation by the  
16 Legislature, to the department and the agency exclusively for the  
17 purposes of this chapter shall be deposited into the Healthy  
18 Californians Biomonitoring Fund, which is hereby established  
19 within the State Treasury. Notwithstanding Section 13340 of the  
20 Government Code, the fund including all interest earned on  
21 moneys in the fund, is hereby continuously appropriated, without  
22 regard to fiscal years, to the division for the purposes of this  
23 chapter. Administrative costs associated with implementing the  
24 program established pursuant to this chapter in any fiscal year  
25 shall not exceed 15 percent of the total funds deposited into the  
26 fund for that fiscal year.  
27

#### 28 Article 5. Reporting 29

30 105459. (a) By January 1, 2009, the department shall submit  
31 an interim report to the Legislature summarizing the activities of  
32 the program, including program descriptions, methodology,  
33 program outcomes, and assessment of the activities of the various  
34 biomonitoring functions conducted pursuant to this chapter.

35 (b) By January 1, 2010, the department shall submit a report  
36 to the Legislature regarding additional activities and  
37 recommendations for improving the program based activities and  
38 findings to date. Every two years thereafter, in consultation with  
39 the panel, the department shall forward a report to the Legislature  
40 on the program, policy, and relevant interagency activities.

1 (c) The department shall provide the public access to  
2 information which they are required to release pursuant to the  
3 California Public Records Act (Chapter 3.5 (commencing with  
4 Section 6250) of Division 7 of Title 1 of the Government Code).

5 ~~(b)~~

6 (d) The division and office shall disseminate biomonitoring  
7 findings to the general public via governmental and other Web  
8 sites in a manner that is understandable to the average person. All  
9 health and environmental exposure data shall be provided to the  
10 general public in a summary format to protect the confidentiality  
11 of program participants. Within 30 calendar days after the  
12 division releases its interim and final report to the Legislature,  
13 the reports shall be made available to the public.

O